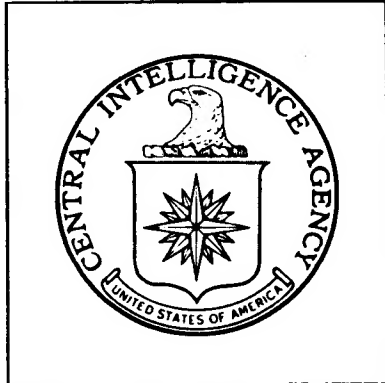


Top Secret



**DIRECTORATE OF
INTELLIGENCE**

**Industrial Facilities
(Non-Military)**

Basic Imagery Interpretation Report

Major Chemical Fertilizer Plants

China

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DATE MAY 1970

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PAGES 23

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CENTRAL INTELLIGENCE AGENCY
Directorate of Intelligence
Imagery Analysis Service

ABSTRACT

This report updates the previous basic reports on 20 major chemical fertilizer plants in China.

Significant changes have been observed at four of the plants since the previous reports. At the Chu-chou plant, the fertilizer production facilities were completed between April 1968 and October 1969; the plant was first seen in operation in February 1969. At the Kai-feng plant, new fertilizer production and handling facilities were nearing completion in November 1969. At the Tai-yuan Chemical Fertilizer Plant, new production facilities had reached the mid-stage of construction in January 1970. At the Tai-yuan Phosphate Fertilizer Plant, footings for a new building and bases for four storage tanks were first seen in January 1970 and construction was continuing in the unidentified processing area.

On the latest coverage, eight of the plants were operating and there was evidence that seven more may have been operating. The small scale and poor quality of the photography available precluded determining whether the remaining five plants were operating.

The cutoff date for information in this report is January 1970.

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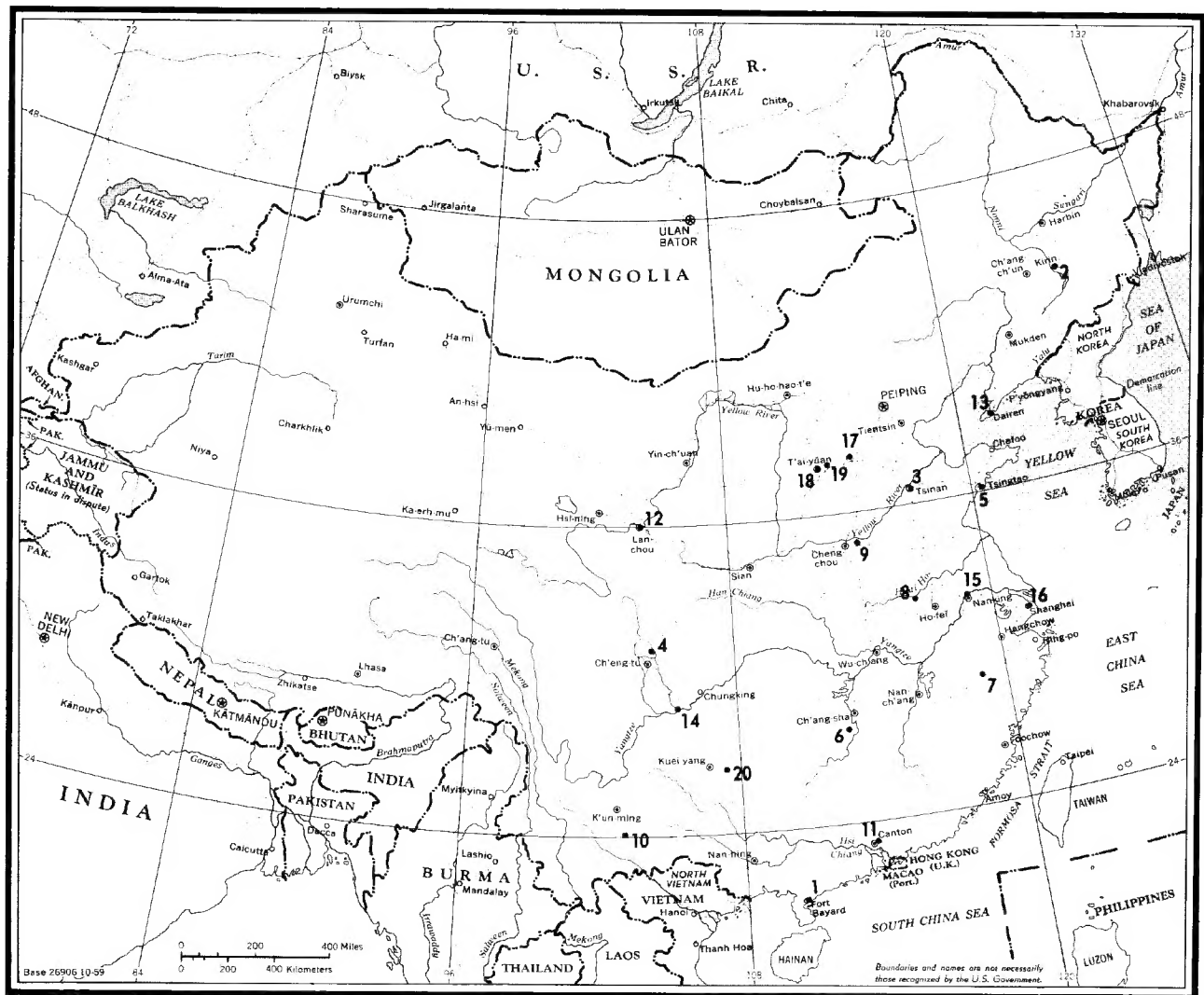


FIGURE 1. LOCATION MAP.

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INTRODUCTION

This report presents information on the current status of 20 fertilizer plants in China and discusses changes since the previous report.

The following list of the plants studied is keyed to Figure 1.

1. Chan-chiang (Fort Bayard) Chemical Fertilizer Plant
2. Chi-lin (Kirin) Chemical Fertilizer Plant
3. Chi-nan (Tsinan) Chemical Fertilizer Plant
4. Chin-tang Fertilizer Plant
5. Ching-tao (Tsingtao) Chemical Fertilizer Plant
6. Chu-chou Nitrogen Fertilizer Plant
7. Chu-hsien Chemical Plant
8. Huai-nan Chemical Fertilizer Plant
9. Kai-feng Chemical Fertilizer Plant
10. Kai-yuan Chemical Plant
11. Kuang-chou (Canton) Chemical Fertilizer Plant
12. Lan-chou Chemical Fertilizer Plant
13. Lu-ta (Dairen) Chemical Combine Kan-ching-tzu
14. Na-chi Chemical Fertilizer Plant Lu-chou
15. Nan-ching (Nanking) Chemical Plant Yung-li Chemical Industries
16. Shang-hai Chemical Plant Wu-ching
17. Shih chia-chuang Nitrogen Fertilizer Plant
18. Tai-yuan Chemical Fertilizer Plant
19. Tai-yuan Phosphate Fertilizer Plant Shansi
20. Tu-yun Nitrogen Fertilizer Plant

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INSTALLATION OR ACTIVITY NAME		COUNTRY
Chi-lin Chemical Fertilizer Plant		CH
UTM COORDINATES	GEOGRAPHIC COORDINATES	
52TCD032666	43-55-25N 126-32-37E	
MAP REFERENCE		
<div></div> USATC, Series 200, Sheet M0290-3HL, 3rd ed, Jul 65, Scale 1:200,000 (SECRET, <div></div>)		
LATEST IMAGERY USED		NEGATION DATE (If required)
<div></div>		NA

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BASIC DESCRIPTION

No changes have been observed in the production facilities at Chi-lin Chemical Fertilizer Plant since April 1968, the date of the latest photography used in the previous report.

Further analysis indicates the plant does not have a methanol production area as previously reported. This area appears to have a coal tar recovery and storage function. The previously identified concentrated nitric acid unit appears to be designed for the production of weak nitric acid.

The plant was in operation in December 1969 as indicated by vapor emanating from several of the production components and by the raised position of the gasholders.

REFERENCES

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Document

CIA. RCS 13/0006/69, Chi-lin Chemical Fertilizer Plant, August 1968,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Chi-nan Chemical Fertilizer Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		
50SNR139638	36-43-19N 117-09-31E		
MAP REFERENCE			
8th RTS. USATC, Series 200, Sheet M0381-21HL, 4th ed, Sep 69, Scale 1:200,000			
(SECRET, [REDACTED])			
LATEST IMAGERY USED		NEGATION DATE (If required)	
[REDACTED]		NA	

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BASIC DESCRIPTION

No changes have been observed in the production facilities at Chi-nan Chemical Fertilizer Plant since January 1968, the date of the latest photography used in the previous report.

Further analysis indicates that the structures previously identified as ammonium hydroxide storage tanks may be gasholders

The plant was possibly in operation in December 1969 as indicated by the presence of coal in the gas production area and rail cars in the fertilizer warehouse area.

REFERENCES

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Document

CIA. RCS 13/0068/69, Chi-nan Chemical Fertilizer Plant, December 1968,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Chin-tang Fertilizer Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
48RVK285158	30-51-50N 104-15-20E		
MAP REFERENCE			
2nd RTS. USATC, Series 200, Sheet M0495-7HL, 2nd ed, Dec 64, Scale 1:200,000			
(SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	
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BASIC DESCRIPTION

No changes have been observed in the production facilities at Chin-tang Fertilizer Plant since November 1968, the date of the latest photography used in the previous report.

Further analysis indicates that the previously identified prilling towers are part of an ammonium nitrate production facility. The previously identified phosphate fertilizer plant appears to lack the components for this function and it is now considered to be an unidentified heat processing plant.

The plant was probably in operation in February 1969. Smoke or vapor was emanating from the sulfuric acid plant and piles of coal were observed in the gas production area.

REFERENCES

	25X1
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Document

- CIA. BCS 13/0107/69 Chin-tang Fertilizer Plant, January 1969, 25X1
 (TOP SECRET RUFF)
- CIA. PIR 75021, Cheng-tu Chemical Fertilizer Plant, December 1966
 (TOP SECRET RUFF) 25X1

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Chu-chou Nitrogen Fertilizer Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
49RGA055850	27-52-40N 113-05-30E		
MAP REFERENCE			
ACIC. USATC, Series 200, Sheet M0498-AL, 2nd ed, Sep 60, Scale 1:200,000 (SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	25X1
		NA	25X1

BASIC DESCRIPTION

All of the major production facilities at Chu-chou Nitrogen Fertilizer Plant have been completed since April 1968, the date of the latest photography used in the previous report.

The plant was in operation for the first time in February 1969 as indicated by steam emanating from the water-gas retorts and by stockpiles of coal in the gas production area. It was probably operating in October 1969 as indicated by the general plant appearance.

Further analysis indicates that the previously identified coal gasification area in an early stage of construction is an unidentified ore handling facility. The previously identified probable thermal power plant under construction now appears to be the gas production area for the fertilizer plant. It consists of a coal receiving and handling facility, a steamplant, and gas retorts.

REFERENCES

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Document

CIA. RCS 13/0048/69, Chu-chou Nitrogen Fertilizer Plant, September 1968,
(TOP SECRET RUFF)

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Chu-hsien Chemical Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
50RPG848986	28-54-30N 118-53-00E		
MAP REFERENCE			
2nd RTS. USATC, Series 200, Sheet M0493-20HL, 3rd ed, Jan 68, Scale 1:200,000 (SECRET/			
LATEST IMAGERY USED		NEGATION DATE (If required)	25X1
		NA	

BASIC DESCRIPTION

No apparent changes have been made to the production facilities at Chu-hsien Chemical Plant since December 1967, the date of the latest coverage used in the previous report.

Further analysis indicates that the plant does not have a hydrochloric acid production capability as previously reported. The area previously assigned this function now appears to be part of the chlorine and caustic soda production area.

The poor quality and small scale of the November 1968 photography precludes determining whether the plant was operating.

REFERENCES

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CIA. RCS 13/0081/69, Chu-hsien Chemical Plant, January 1969,
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INSTALLATION OR ACTIVITY NAME		COUNTRY
Huai-nan Chemical Fertilizer Plant		CH
UTM COORDINATES	GEOGRAPHIC COORDINATES	25X1
50SMM958112	32-38-16N 116-57-14E	
MAP REFERENCE		
2nd RTS. USATC, Series 200, Sheet M0386-21HL, 3rd ed, May 68, Scale 1:200,000 (SECRET/		
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LATEST IMAGERY USED		NEGATION DATE (If required)
		NA
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BASIC DESCRIPTION

No changes have been observed in the production facilities at Huai-nan Chemical Fertilizer Plant since December 1967, the date of the latest photography used in the previous report.

The plant was possibly in operation in November 1968 as indicated by the presence of coal in the gas production area.

REFERENCES

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CIA. RCS 13/0060/69, Huai-nan Chemical Fertilizer Plant, December 1968,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Kai-yuan Chemical Plant*		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
48QUM218260	23-44-05N 103-14-41E		
MAP REFERENCE			
548th RTG. USATC, Series 200, Sheet MO616-2HL, 4th ed, Sep 68, Scale 1:200,000			
(SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	
		NA	25X1

*The plant name given in the Data Block is from the Basic Encyclopedia. The results of this and previous studies show that the name should be Kai-yuan Chemical Fertilizer Plant. Action has been taken to have the name corrected in the BE.

BASIC DESCRIPTION

No changes have been observed in the production facilities at Kai-yuan Chemical Plant since November 1968, the date of the latest photography used in the previous report.

The poor quality and small scale of the February 1969 photography precludes determining whether the plant was operating.

REFERENCES

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Document

CIA. RCS 13/0066/69, Kai-yuan Chemical Fertilizer Plant, April 1969,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Lan-chou Chemical Fertilizer Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		
48SUQ740980	36-07-19N 103-35-52E	25X1	
MAP REFERENCE			
ACIC. USATC, Series 200, Sheet MO383-22HL, 3rd ed, Dec 68, Scale 1:200,000			
(SECRET)		25X1	
LATEST IMAGERY USED		NEGATION DATE (If required)	
		NA	
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BASIC DESCRIPTION

No changes have been observed in the production facilities at Lan-chou Chemical Fertilizer Plant since [] the date of the latest photography used in the previous report. 25X1

Further analysis indicates that the plant does not have a possible nitrophosphate production area as previously reported. This area appears to be a plant support area. The previously identified methanol production facility now appears to be a possible coal tar recovery and storage facility.

The plant was in operation in December 1969 as evidenced by vapor emanating from the ammonium nitrate reactor building and from several plant cooling towers.

REFERENCES

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CIA. RCS 13/0059/69, Lan-chou Chemical Fertilizer Plant, November 1968,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Na-chi Chemical Fertilizer Plant Lu-chou		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		
48RWG368833	28-46-35N 105-22-35E		
MAP REFERENCE			
15th RTS. USATC, Series 200, Sheet M0495-23H1, 3rd ed, Jul 69, Scale 1:200,000 (SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	
		NA	

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BASIC DESCRIPTION

No changes have been observed in the production facilities at the Na-chi Chemical Fertilizer Plant since May 1968, the date of the latest imagery used in the previous report.

The small scale and poor quality of the February 1969 photography precludes determining whether the plant was operating.

REFERENCES

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Document

CIA. BCS 13/0073/69, Na-chi Chemical Fertilizer Plant, January 1969,
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CIA. PIR 65136, Lu-chou Nitrogen Fertilizer Plant, May 1966,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Nan-ching Chemical Plant Yung-li Chemical Industries		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		
50SPL665658	32-12-58N 118-45-43E		
MAP REFERENCE			
2nd RTS. USATC, Series 200, Sheet MO386-22HL, 3rd ed, Sep 67, Scale 1:200,000 (SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	
		NA	

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BASIC DESCRIPTION

No changes have been observed in the nitrogen fertilizer plant at Nan-ching Chemical Plant since November 1967, the date of the latest imagery used in the previous report.

The plant was probably in operation in February 1969 as evidenced by smoke or vapor emanating from the area of the sulfuric acid plant.

REFERENCES

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Document

CIA. BCS 13/0114/69, Nan-ching Chemical Plant Yung-li Chemical Industries, January 1969, (TOP SECRET RUFF)

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Shang-hai Chemical Plant Wu-ching		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
51RUE532399	31-04-30N 121-27-50E		
MAP REFERENCE			
2nd RTS. USATC, Series 200. Sheet M0492-7HL. 3rd ed. May 68. Scale 1:200,000			25X1
(SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	
		NA	25X1

BASIC DESCRIPTION

Since November 1968, the date of the latest photography in the previous report, a small gasholder has been built in the gas production area and two probable water treatment tanks are under construction in the water treatment area at Shang-hai Chemical Plant.

Although no positive indicators of production activity are seen on the small-scale photography of December 1969, the plant was probably in operation as indicated by construction activity and the general appearance of the plant.

REFERENCES

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Document

- CIA. BCS 13/0096/69, Shang-hai Chemical Plant Wu-ching, February 1969, (TOP SECRET RUFF) 25X1
- CIA. PIR 65105, Wu-ching Chemical Fertilizer Plant, Shang-hai, China, April 1966 (SECRET) 25X1

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Shih-chia-chuang Nitrogen Fertilizer Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
50SKT844163	38-04-20N 114-31-35E		
MAP REFERENCE			
ACIC. USATC, Series 200, Sheet M0382-14HL, 3rd ed, May 67, Scale 1:200,000 (SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	25X1
		NA	25X1

BASIC DESCRIPTION

No changes have been observed in the production facilities at Shih-chia-chuang Nitrogen Fertilizer Plant since September 1968, the date of the latest photography used in the previous report.

The small scale of the May 1968 photography precludes determining whether the plant was operating.

REFERENCES

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Document

CIA. RCS 13/0115/69, Shih-chia-chuang Nitrogen Fertilizer Plant, April 1969,
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INSTALLATION OR ACTIVITY NAME		COUNTRY
Tu-yun Nitrogen Fertilizer Plant		CH
UTM COORDINATES	GEOGRAPHIC COORDINATES	25X1
48RYE510020	26-13-10N 107-30-50E	
MAP REFERENCE		
15th RTS. USATC, Series 200, Sheet M0497-11HL, 2nd ed, Sep 65, Scale 1:200,000		
(SECRET)		
LATEST IMAGERY USED		NEGATION DATE (if required)
		NA

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BASIC DESCRIPTION

No changes have been observed in the production facilities at Tu-yun Nitrogen Fertilizer Plant since December 1968, the date of the latest photography used in the previous report.

The small scale of the December 1969 coverage precludes determining whether the plant was operating.

REFERENCES

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Document

CIA. RCS 13/0095/69, Tu-yun Nitrogen Fertilizer Plant, April 1969,
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